

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1 - 17. (Canceled)

1                   18.   (Currently amended): A method of sharing data in a computer system,  
2   said computer system comprising a first computer, a second computer, and a storage system  
3   comprising a disk control unit, a first disk unit, a second disk unit, and a third disk unit, the  
4   method comprising:  
5                   forming a first duplex state between said first disk unit and said second disk unit,  
6   wherein said disk control unit, in response to a write request from said first computer, stores  
7   write data associated therewith to both said first disk unit and to said second disk unit, wherein  
8   said disk control unit, in response to a write request from said second computer, stores write data  
9   associated therewith to said third disk unit;  
10                  forming a simplex state, wherein said disk control unit, in response to a write  
11   request from said first computer, stores write data associated therewith only to said first disk  
12   unit, wherein said disk control unit, in response to a write request from said second computer,  
13   stores write data associated therewith to said second disk unit; and  
14                  forming a second duplex state between said first disk unit and said third disk unit,  
15   wherein said disk control unit, in response to a write request from said first computer, stores  
16   write data associated therewith to both said first disk unit and to said third disk unit, wherein said  
17   disk control unit, in response to a write request from said second computer, stores write data  
18   associated therewith to said second disk unit.  
19                  ~~subsequent to said step of forming a simplex state, re-mapping a disk identifier,~~  
20   ~~said second computer using said disk identifier to access said storage system,~~  
21                  ~~wherein said disk identifier is associated with said third disk unit before said re-~~  
22   ~~mapping and said disk identifier is associated with said second disk unit after said re-mapping,~~

23 ~~whereby said third disk unit is accessed when said second computer accesses said storage system~~  
24 ~~at a time prior to said re-mapping and said second disk unit is accessed when said second~~  
25 ~~computer accesses said storage system at a time subsequent to said re-mapping.~~

1                   19.     (Currently amended): A method of sharing data according to claim 18,  
2 further comprising forming a simplex state subsequent to forming said second duplex state,  
3 wherein said disk control unit, in response to a write request from said first computer, stores  
4 write data associated therewith only to said first disk unit, wherein said disk control unit, in  
5 response to a write request from said second computer, stores write data associated therewith to  
6 said third disk unit, subsequent to said step of re-mapping, forming a duplex state between said  
7 first disk unit and said third disk unit.

1                   20.     (Currently amended): A method of sharing data in a computer system,  
2 said computer system comprising a first computer, a second computer, and a storage system  
3 comprising a disk control unit, a first disk unit, a second disk unit, a third disk unit, and a fourth  
4 disk unit, the method comprising:

5                   forming a duplex state between said first disk unit and said second disk unit,  
6 wherein said disk control unit, in response to a write request from said first computer, stores  
7 write data associated therewith to both said first disk unit and to said second disk unit, wherein  
8 said disk control unit, in response to a write request from said second computer, stores write data  
9 associated therewith to said fourth disk unit;

10                  forming a simplex state, wherein said disk control unit, in response to a write  
11 request from said first computer, stores write data associated therewith only to said first disk  
12 unit; and

13                  subsequent to said step of forming a simplex state, copying data stored in said  
14 second disk unit to said third disk unit and subsequent to said copying then said disk control unit  
15 accesses said third disk unit in response to I/O requests from said second computer. ~~re-mapping a~~  
16 ~~disk identifier, said second computer using said disk identifier to access said storage system,~~  
17 ~~wherein said disk identifier is associated with said fourth disk unit before said re-~~  
18 ~~mapping and said disk identifier is associated with said third disk unit after said re-mapping,~~

19 ~~whereby said fourth disk unit is accessed when said second computer accesses said storage~~  
20 ~~system at a time prior to said re-mapping and said third disk unit is accessed when said second~~  
21 ~~computer accesses said storage system at a time subsequent to said re-mapping.~~

1                   21.     (Currently amended): A method of sharing data according to claim 20,  
2 wherein said step of copying data includes steps of:  
3                   converting a first data format of data stored in said second disk unit to a second  
4 data format; and  
5                   storing said data according to said second data format to said fourth disk unit.

1                   22.     (Previously presented): A method of sharing data according to claim 21,  
2 wherein said first data format is a count key data format and said second data format is a fixed-  
3 length block format.

1                   23.     (Previously presented): A method of sharing data according to claim 20,  
2 wherein said computer system further comprises a processor coupled to said storage system, and  
3 said step of copying data is performed by said processor.

24-26. (Canceled)

1                   27.     (Currently amended): A method of sharing data in a computer system,  
2 said computer system comprising a first computer, a second computer, a first storage system  
3 coupled to said first computer and comprising a first disk unit and a first disk control unit, and a  
4 second storage system coupled to said second computer and comprising a second disk unit, a  
5 third disk unit, a fourth disk unit, and a second disk controller unit, wherein said first disk control  
6 unit and said second disk control unit are coupled via a network, the method comprising steps of:  
7                   copying data stored in said first disk unit to said second disk unit via said  
8 network;  
9                   forming a duplex state between said first disk unit and said second disk unit,  
10 wherein said first disk control unit, in response to a write request from said first computer, stores  
11 write data associated therewith to both said first disk unit and to said second disk unit, wherein

12 said second disk control unit, in response to a write request from said second computer, stores  
13 write data associated therewith to said fourth disk unit;

14 forming a simplex state, wherein said first disk control unit, in response to a write  
15 request from said first computer, stores write data associated therewith only to said first disk  
16 unit; and

17 subsequent to said step of forming a simplex state, copying data stored in said  
18 second disk unit to said third disk unit and subsequent to said copying, said second disk control  
19 unit accesses said third disk unit, in response to I/O requests from said second computer, re-  
20 mapping a disk identifier, said second computer using said disk identifier to access said storage  
21 system;

22 ~~wherein said disk identifier is associated with said fourth disk unit before said re-~~  
23 ~~mapping and said disk identifier is associated with said third disk unit after said re-mapping,~~  
24 ~~whereby said fourth disk unit is accessed when said second computer accesses said storage~~  
25 ~~system at a time prior to said re-mapping and said third disk unit is accessed when said second~~  
26 ~~computer accesses said storage system at a time subsequent to said re-mapping.~~

1 28. (Previously presented): A method of sharing data according to claim 27,  
2 wherein said step of copying data includes steps of:  
3 converting a data format of data stored in said second disk unit to another data  
4 format; and  
5 storing data according to said other data format to said third disk unit.

1 29. (Currently amended): A storage system comprising:  
2 a disk control unit; and  
3 a plurality of disk units,  
4 wherein said disk control unit is operable to form a duplex state between a first  
5 disk unit and a second disk unit, wherein data associated with a write request from a first  
6 computer is stored to both said first disk unit and to said second disk unit, wherein a third disk  
7 unit is accessed to service an I/O request from a second computer,

8                    wherein said disk control unit is further operable to form a simplex state between  
9                    said first disk unit and said second disk unit, wherein data associated with a write request from  
10                   said first computer is stored only to said first disk unit,

11                   wherein during said simplex state, data stored in said second disk unit is copied to  
12                   a third disk unit and said second disk unit is accessed to service an I/O request from said second  
13                   computer, and a disk identifier is re-mapped,

14                   ~~wherein a second computer uses said disk identifier to access said storage system,~~  
15                   ~~wherein before said disk identifier is re-mapped, it is associated with said third~~  
16                   ~~disk unit so that said third disk unit is accessed when said second computer accesses said storage~~  
17                   ~~system,~~

18                   ~~wherein after said disk identifier is re-mapped, it is associated with said second~~  
19                   ~~disk unit so that said second disk unit is accessed when said second computer accesses said~~  
20                   ~~storage system.~~

1                   30.     (Previously presented): The storage system of claim 29 wherein  
2                   subsequent to said step of re-mapping, forming a duplex state between said first disk unit and  
3                   said third disk unit.

1                   31.     (Currently amended): A storage system comprising:  
2                   a disk control unit; and  
3                   a plurality of disk units,

4                   wherein said disk control unit is operable to form a duplex state between a first  
5                   disk unit and a second disk unit, wherein data associated with a write request from a first  
6                   computer is stored to both said first disk unit and to said second disk unit, wherein data  
7                   associated with a write request from a second computer is stored to a fourth disk unit,

8                   wherein said disk control unit is further operable to form a simplex state, wherein  
9                   data associated with a write request from said first computer is stored only to said first disk unit,

10                   wherein during said simplex state, data stored in said second disk unit is copied to  
11                   a said third disk unit and subsequent to said copying, data associated with a write request from  
12                   said second computer is stored to said third disk unit, and a disk identifier is re-mapped,

13                   ~~wherein a second computer uses said disk identifier to access said storage system,~~  
14                   ~~wherein before said disk identifier is re-mapped, it is associated with a fourth disk~~  
15 ~~unit so that said fourth disk unit is accessed when said second computer accesses said storage~~  
16 ~~system,~~

17                   ~~wherein after said disk identifier is re-mapped, it is associated with said third disk~~  
18 ~~unit so that said third disk unit is accessed when said second computer accesses said storage~~  
19 ~~system.~~

1                   32.     (Previously presented): The storage system of claim 31, wherein data  
2 stored on said second disk unit is of a first data format and data stored on said third disk unit is of  
3 a second data format.

1                   33.     (Previously presented): The storage system of claim 32, wherein said first  
2 data format is a count key data format and said second data format is a fixed-length block format.

34.     (Canceled)

1                   35.     (Currently amended): A storage system comprising:  
2 a disk control unit;  
3 a plurality of disk units; and  
4 a network connecting at least some of said disk units,  
5 ~~wherein~~ said disk control unit is being operable to copy data stored in a first disk  
6 unit to a second disk unit via said network,

7                   ~~wherein~~ said disk control unit is being operable to form a duplex state between  
8 said first disk unit and said second disk unit, wherein data associated with a write request from a  
9 first computer is stored to both said first disk unit and to said second disk unit, wherein data  
10 associated with a write request from a second computer is stored to a third disk unit,

11                   ~~wherein~~ said disk control unit is further being operable to form a simplex state,  
12 wherein data associated with a write request from said first computer is stored only to said first  
13 disk unit,

14                    wherein during said simplex state, data stored in said second disk unit is copied to  
15 a third disk unit and, subsequent to said copying, said second computer accesses said third disk  
16 unit, a disk identifier is re-mapped,

17                    ~~wherein a second computer uses said disk identifier to access said storage system,~~  
18                    ~~wherein before said disk identifier is re-mapped, it is associated with said third~~  
19 ~~disk unit so that said third disk unit is accessed when said second computer accesses said storage~~  
20 ~~system,~~

21                    ~~wherein after said disk identifier is re-mapped, it is associated with said second~~  
22 ~~disk unit so that said second disk unit is accessed when said second computer accesses said~~  
23 ~~storage system.~~

1                    36.    (Previously presented): The storage system of claim 27, wherein data  
2 stored on said second disk unit is of a first data format and data stored on said third disk unit is of  
3 a second data format.

37 and 38.    (Canceled)